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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,275	12/16/2004	Mark Thomas Johnson	NL 020521	3546
24737 7590 01/24/2008 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510				
			EXAMINER SHEETS, ELIJAH M	
			ART UNIT 2629	PAPER NUMBER
			MAIL DATE 01/24/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/518,275	Applicant(s) JOHNSON ET AL.	
	Examiner Eli M. Sheets	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 16 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 December 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>09/21/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a) because they fail to show the third electrodes surrounding the first electrodes as described in the specification. Although Fig. 3 shows item 6 as being all white space around item 5 and item 3, there is no clear boundary for the electrode, and is therefore unclear and is not understood. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim and Specification Objections

2. Claim 1 and paragraphs [0004] and [0005] of the specification are objected to for minor informalities in the claim and specification's structure. In the claim and specification, "electrochromic material being present between the first electrode and the second electrode" should be contained in the same paragraph. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1 (and all dependent claims) and 4 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Regarding claim 1 and subsequent dependent claims, the claim and specification are unclear as to the meaning of the claimed "optical state". Therefore, as the invention as claimed could not be made or used by one of ordinary skill in the art, the claims are rejected.

Regarding claim 4 specifically, the specification and drawings fail to show or explain a definite meaning to the use of the word "surround" in the claim. Proper amendment is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in **Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966)**, that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows: (*See MPEP Ch. 2141*)

- a. Determining the scope and contents of the prior art;
- b. Ascertaining the differences between the prior art and the claims in issue;
- c. Resolving the level of ordinary skill in the pertinent art; and
- d. Evaluating evidence of secondary considerations for indicating obviousness or nonobviousness.

6. Claims 1-3 and 6-8 are rejected under 35 USC 103(a) as being unpatentable over admitted prior art in view of DiSanto et al. (US 5,345,251, hereinafter referred to as DiSanto).

Regarding claim 1, applicant's admitted prior art (Leventis, see Paragraph [0009] of current application) teaches a display panel comprising:

A plurality of picture elements, each picture element having respective neighboring picture elements and comprising a first electrode and a second electrode for the application of a potential difference between the first and second electrode, and

electrochromic material being present between the first electrode and the second electrode,

having an optical state, and

being able to receive an electrical charge, induced by the potential difference, which provides a change in the optical state, and

crosstalk controlling means for adjusting first electrical currents between the picture elements and their neighboring picture elements (Current application, Paragraphs [0001]-[0008]).

However, applicant's prior art fails to teach the crosstalk controlling means comprising third electrodes between the picture elements and their respective neighboring picture for receiving first potentials to adjust first electrical currents. DiSanto teaches third electrodes (guard elements formed of ITO, which make the guards conductive, and are viewed therefore as electrodes, as claim 5 of DiSanto teaches that the guard lines control the extent of the flow of charged particles) placed between pixels (guard elements, see Figs. 1 and 4, items 16). Therefore, it would have been obvious to amend the display panel of applicant's admitted prior art (and Leventis) with the third electrodes placed between picture elements of DiSanto for the benefit of solving the crosstalk problem (DiSanto Col. 3, lines 2-3).

Regarding claim 2, admitted prior art as amended by DiSanto teaches that the first (DiSanto Fig. 4 item 14), and the third electrodes (item 16) are present on a first substantially flat surface (item 10).

Regarding claim 3, admitted prior art as amended by DiSanto teaches the display panel as claimed in claim 2, characterized in that a surface area of the third electrodes (DiSanto Fig. 4, item 16) facing the first substrate (item 30) is smaller than a surface area of the first electrodes (item 14) facing the first substrate (item 30).

Regarding claims 6 and 7, Official Notice is taken that the use of switching elements, especially transistor devices, are well-known and notoriously used in the art to control the application of selecting voltages to electrodes for the addressing of pixels during operation.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to amend the teachings of applicant's admitted prior art as amended by DiSanto to include switching elements attached to any of the electrodes for the benefit of timing control of the display's pixel emissions (first and second electrodes) and control of the crosstalk phenomenon (third electrode).

Regarding claim 8, applicant's admitted prior art (Leventis) as amended by DiSanto teaches a display panel as claimed in claim 1 characterized in that the second electrodes of a number of picture elements are integral (Leventis Fig. 9B, top electrode, which is integral to all 5 pixels in the figure).

7. Claim 5 is rejected under 35 USC 103(a) as being unpatentable over admitted prior art in view of DiSanto and further in view of Goden (US 6,738,039).

Regarding claim 5, applicant's admitted prior art as amended by DiSanto teaches the display panel as claimed in claim 3 characterized in that the second electrodes are present on a second substantially flat substrate (Leventis Fig. 9), the first and the second electrodes being situated between the first and the second substrate (Leventis Fig. 9A and Fig 13).

However, admitted prior art (Leventis) as amended by DiSanto fails to teach fourth crosstalk electrodes. However, Goden teaches (Fig. 12) the crosstalk controlling means further comprise fourth electrodes (small electrodes on top of figure, near boundary wall), present on one of the first and the second substrate (white substrates at top and bottom of figure) and between the second electrodes (items 5 and 6), the fourth electrodes being able to receive second potentials (inherent to electrode) to adjust the first electrical currents between the picture

elements and their neighboring picture elements for the benefit of reduced crosstalk (Col. 16, lines 3-6).

Contact

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eli Sheets whose telephone number is (571) 272-6532. The examiner can normally be reached on M-F 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amare Mengistu can be reached on (571) 272-7674. Customer Service can be reached at (571) 272-2600. The fax number for the organization where this application or proceeding is assigned is (571) 273-7674.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Elijah Sheets/


AMARE MENGISTU
SUPERVISORY PATENT EXAMINER